BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 5000000.00

Name of Work: Detailed Estimate for the work of Improvments to roads and drains to the balance roads of Someshwara nagara in ward No 04.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17)	Cum.							
	for cc roads		1	50.00	3.00	0.20	30.00		
			1	55.00	3.00	0.20	33.00		
	2nd b cross road		1	75.00	6.00	0.20	90.00		
	Desilting of Existing drain		2	75.00	0.60	0.60	54.00		
							207.00	86.92	17992.00
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
2	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)	**cum**							
	For Culverts		2	7.00	1.50	1.00	21.00		
	for RCC drain		2	75.00	1.00	1.00	150.00		
			2	65.00	1.00	1.00	130.00		
			2	110.00	1.00	1.00	220.00		
							521.00	200.34	104377.00
	Basic Rate	189.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Area Weightage @ 6%	11.34							
	Total	200.34							
3	KSRB 100-1 Loading and unloading ofstone aggregates / sand/ kanker/ Moorum /soil KSRRB M100-1 Placing tipper at loading with front end loader dumpting turning for return trip excluding time for haulged and return trip complete as per specification item No 17.1 page 130 and KSRB M.100.4.1 costof haulage excluding loading and unloading MORTH to a distance of 4.00 K.M (Item No 17.4 Page 134 (SR 2016-17)	cum							
				Vide Item No. 1			728.00	85.65	62352.00
	Basic Rate for loading and unloading	68.00							
	Basic Rate for Haulage upto 4.00 k.m =1.28 X 2.50 X 4	12.80							
		80.80							
	Area Weightage @ 6%	4.85							
	Total	85.65							
4	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix **1:3:6 with OPC cement** @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.2)/ PWD SR 2016-17	Cum							
	For Culverts		2	7.00	1.50	0.15	3.15		
	for RCC drain		2	75.00	1.00	0.15	22.50		
			2	65.00	1.00	0.15	19.50		
			2	110.00	1.00	0.15	33.00		
	for cc road		1	50.00	3.00	0.15	22.50		
			1	55.00	3.00	0.15	24.75		
							125.40	5348.76	670735.00
	Basic Rate	5046.00							
	Area Weightage @ 6%	302.76							
	Total	5348.76							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
5	KSRB 4.2.2 Providing and laying in position plain cement concrete of mix M20 withOPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @0.460cum with superplastesisre @ 3lts conforming to IS9103-1999Reffirmed machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, **retaining walls, return walls, walls(any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc,** including cost of all materials, labour HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1.4.6, No. KBS 4.1.4.6, No. 13/ Item No. 4.11/ PWD SR 2016-17	Cum							
	For Culverts		2	7.00	1.40	0.23	4.51		
		2x2	4	7.00	0.23	0.90	5.80		
	for RCC drain		2	75.00	0.90	0.15	20.25		
		2x2	4	75.00	0.15	0.70	31.50		
			2	65.00	0.90	0.15	17.55		
		2x2	4	65.00	0.15	0.70	27.30		
			2	110.00	0.90	0.15	29.70		
		2x2	4	110.00	0.15	0.70	46.20		
							182.80	6371.66	1164765.00
	Basic Rate	6011.00							
	Area Weightage @ 6%	360.66							
	Total	**6371.66**							
6	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 Page No. 17/ Item No. 4.46/ PWD SR 2016-17	Quintal							
	for RCC drain 75 kg/cum		0.750	172.50			129.38		
	for culvert 100 kg/cum		1.000	10.30			10.30		
				182.80			139.68	7067.50	987181.00
	Basic Rate	7067.50							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, attached pilasters, bittresses,buttresses plinth and string course including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 15/ Item No. 4.31/ PWD SR 2016-17	sqm							
	culvert	2x4	8	7.00		0.90	50.40		
		2x2	4	75.00		0.70	210.00		
		2x2	4	65.00		0.70	182.00		
		2x2	4	110.00		0.70	308.00		
							750.40	310.58	233059.00
	Basic Rate	293.00							
	Area Weightage @ 6%	17.58							
	Total	**310.58**							
8	Providing precast slab of **250 mm thick including cost of all** materials, labour, curing,transportation,loading unloading,etc.,complete as per the direction of engineer in charge-	**sqm**							
		2x13	26	1.50	0.60		23.40		
							23.40	5111.00	119597.00
	Data Rate	5111.00							
9	Providing precast slab of **100 mm thick including cost of all** materials, labour, curing,transportation,loading unloading,etc ,complete as per the direction of engineer in charge-	**sqm**							
			2	75.00	0.75		112.50		
			1	65.00	0.75		48.75		
			2	110.00	0.75		165.00		
			1	30.00	0.75		22.50		
							348.75	2100.00	732375.00
	Data Rate	2100.00							
10	KSRRB M300-53: construction of embankment with approved material gravel/murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement table 300-2 complete as per specifications. (which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) MORTH specification Page No. 305.4.3, No. 156/ Item No. 19.60/ PWD SR 2016-17	cum							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	for cc road		1	50.00	3.00	0.20	30.00		
			1	55.00	3.00	0.20	33.00		
	2nd b cross road		1	75.00	6.00	0.20	90.00		
							153.00	**320.12**	**48978.36**
	Basic Rate	302.00							
	Area Weightage @ 6%	18.12							
	Total	**320.12**							
11	KSRRB M400-6.1. **Construction of granular sub-base by providing close graded material, crushed stone** aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).	cum							
	for cc road		1	50.00	3.00	0.15	22.50		
			1	55.00	3.00	0.15	24.75		
	2nd b cross road		1	75.00	6.00	0.15	67.50		
							114.75	1665.26	**191089.00**
	Basic Rate	1571.00							
	Area Weightage @ 6%	94.26							
	Total	**1665.26**							
12	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. **Providing, laying, spreading and compacting graded stones aggregate to wet mix** macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.158 I.No.20.18)	cum							
	2nd B cross road		1	75.00	6.00	0.15	67.50		
							67.50	1768.08	**119345.00**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13	Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)	Sqm							
			1	75.00	6.00		450.00		
							450.00	27.56	**12402.00**
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
14	KSRRB M500- 15 Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)	cum							
	for camber correction only								
	2nd B cross road		1	75.00	2.10	0.05	7.88		
							7.88	6435.26	**50678.00**
	Basic Rate	6071.00							
	Area Weightage @ 6%	364.26							
	Total	**6435.26**							
15	KSRRB 500-7 Providing and **applying tack coat with bitumen emulsion** using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
	qty same as item no						**450.00**	14.84	**6678.00**
	Basic Rate	14.00							
	Area Weightage @ 6%	0.84							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Total	**14.84**							
16	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No.509 (P.No.164 Item No.21.22.6)	cum							
	2nd b cross road		1	75.00	6.00	0.04	18.00		
							18.00	7270.54	**130870.00**
	Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							
17	KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface-providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.185 & I.No.24.15)	sqm							
	2nd b cross road		2	75	0.10		15.00		
							15.00	542.72	**8141.00**
	Basic Rate	512.00							
	Area Weightage @ 6%	30.72							
	Total	**542.72**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
18	KSRRB M600-6: cement concrete pavement, construction unreinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with 43 grade cement or any other type as per clause 1051.2.2M20/M30 at 380/450 kg per cum, coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25mm, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including leveling the form work as per drawing.), spreading the concrete with shovels, rackers compacted using needle, scred and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved curing compound, finishing to lines and grade as per drawing complete as per specification M30(at 360kg per cum coarse aggregate @ 0.69cum and fine aggregare @ 0.46cum), . No. 174/ Item No. 22.6.1 SR 2016-17	Cum							
	for cc road		1	50.00	3.00	0.15	22.50		
			1	55.00	3.00	0.15	24.75		
							47.25	6217.96	293799.00
	Basic Rate	5866.00							
	Area Weightage @ 6%	351.96							
	Total	6217.96							
19	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift. Page No 177 Item No 22.7 SR 2016-17	Sqm							
	for cc road		1	50.00	3.00		150.00		
			1	55.00	3.00		165.00		
							315.00	95.40	30051.00
	Basic Rate	90.00							
	Area Weightage @ 6%	5.40							
	Total	95.40							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
20	Providing groove cutting for width of 5mm to 100m depth 80mm-100 including cost of cutting machine, generatoe & HOM of machinery, including cost of blade, coolant etc., including cleaning of groove & providing sand and hot birumen fillars, and filler metal etc., including cost of conveyance of all materials, Labour, lead and lift charges and all other incidental charges as per drawing and as per specifications, do- for concrete pavement Item no 22.8.1 Page No 178 SR 2016-17	Rmt							
	for cc road		16	3.00			48.00		
			18	3.00			54.00		
							102.00	121.90	12434.00
	Basic Rate	115.00							
	Area Weightage @ 6%	6.90							
	Total	121.90							
22	Miscellaneous charges								3101.64
								Total	5000000.00
(Rupees Fifty Lakhs Only)									

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of 2016-17
3 The provisions were made in this estimate are necessary and adequate.

Assistant Engineer

Assistant Executive Engineer
Yelahanka Satellite town sub division
Bangalore-64

Executive Engineer
Yelahanka Division
Bangalore-64

ADMINISTRATIVELY SANCTIONED FOR Rs. 50,00,000/-
Rupees fifty lakhs only

Job code 000-004-18-000004

T.C(4)PRI/AB/51/2017-18.
dated 10-11-2017 50.00 lakhs

Technical Sanction
Accorded For 50.00 lakhs.
Head of A/C P2178
CER NO : 425 Dt:. 11/12/17

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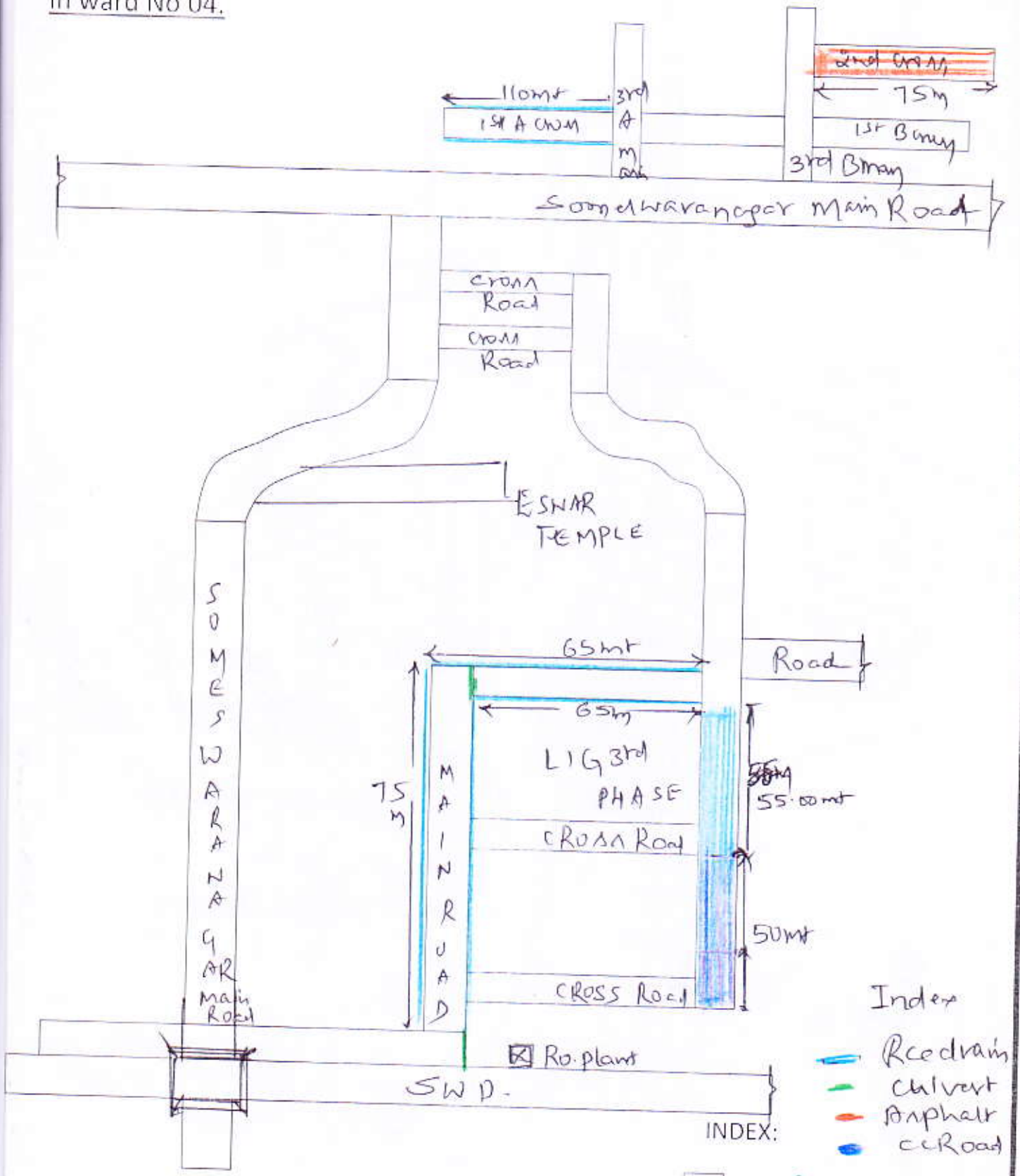
NAME OF WORK:

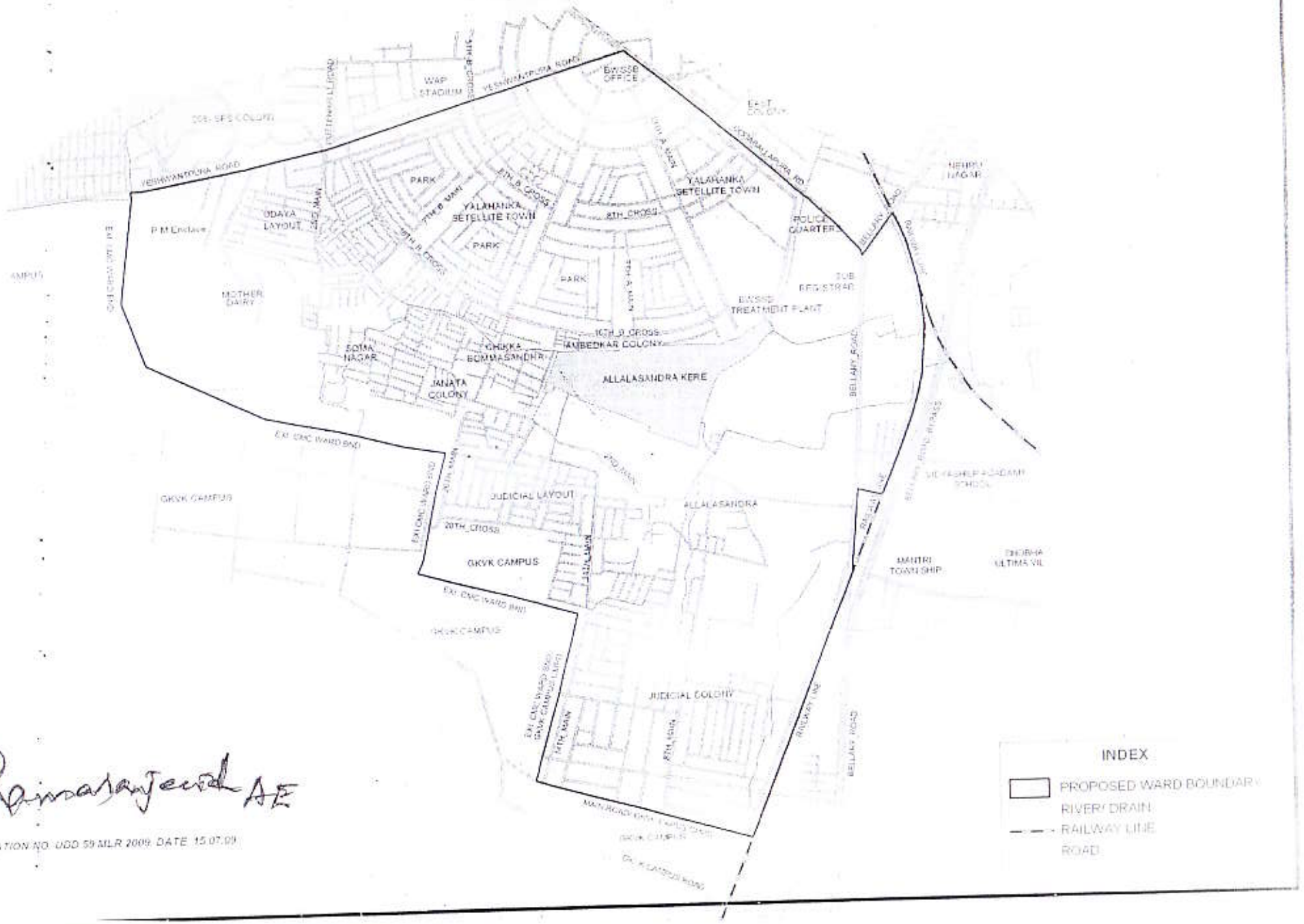
Improvments to roads and drains to the balance roads of Someshwara nagara in ward No 04.



A.E. Ramanjeeriah AE2

A.E.E.

BRUHAT BANGALORE MAHANAGAR PALIKE
WARD: 4 - YELHANKA SATELLITE TOWN



Ramalanjeeva AE

NOTIFICATION NO. UDD 59 MLR 2009, DATE 15.07.09